

VIDEO

FAQ

Q What is HDCP and do I need it?

A The High-Bandwidth Digital Content Protection (HDCP) standard is designed to encrypt digital video links (DVI and HDMI), such as the one between your Sky HD box and your TV. In addition to HDCP, HD DVD and Blu-ray players also use Advanced Access Content System (AACS) digital rights management. This system can detect if an HDCP-enabled video link is available and, if it isn't, an image constraint tag (ICT) on the disc can be set to downgrade HD content to standard definition or refuse to play it.

However, none of the major studios is using the ICT and there are no firm plans to do so. Currently, if you're buying a new TV, an HDCP-compliant one ensures you can play all future content. If you have an existing TV or projector that doesn't have HDCP, don't worry; there's currently nothing to stop you enjoying HD video.

Seth Barton

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MICROSOFT Xbox 360 HD-DVD Player

★★★★★

£130 inc VAT



If you have a High-Definition (HD) TV or projector and have been dying to find a cheap way to watch HD movies, Microsoft's Xbox 360 HD-DVD Player is a good way to do so, particularly if you also need to upgrade your games console.

The outer casing matches the Xbox 360's colour and styling, and can either lie down on top of the unit or stand up beside it. Installation is easy, and you simply have to insert the driver disc into the console and connect the drive using the supplied USB lead. The drive has two USB2 ports on the rear, so you gain a USB2 port by adding the drive.

The HD-DVD drive is seamlessly integrated into the Xbox 360's menu system. You can use the drive to play DVDs as well, so you don't have to swap out your game disc every time you want to watch a film. It comes bundled with the Universal Media Remote, which costs £20 to buy on its own. The remote is excellent; it's clearly labelled, nicely shaped and has backlit buttons, too.

The video stored on HD-DVDs has a resolution of 1,920x1,080 (1080p). You can output the video in 720p, 1080i or 1080p to match your television's or projector's native resolution. The Xbox 360 has both component and VGA outputs available; however, some 1080p HD TVs aren't capable of receiving a 1080p signal using analogue inputs.

At present, there's no HDMI or DVI output on the 360, which raises a different problem: HDCP. With no digital output, the Xbox 360 doesn't support HDCP, which could cause problems when

SUMMARY

- ✓ Cheap
- ✓ Comes with remote control
- ✗ You need an Xbox 360

HD-DVD DRIVE USB2 interface, two USB2 ports
PART CODE 9Z5-00013
SUPPLIER www.hmv.co.uk
DETAILS www.xbox.com



protected content is released; see the FAQ on the left for more details.

For a limited time, the drive is bundled with a free copy of *King Kong*. We tested the drive on a 720p LCD HDTV. The sharpness of the HD video is fantastic and an obvious step up from watching DVDs. Scenes with close-ups of the actors are the most impressive, where fine detail in their skin and hair really stands out. Better still, we couldn't detect any compression issues arising from the VC1 codec. The quality of the video is so good that we spotted flaws in *King Kong*'s special effects that we never noticed on the DVD version.

The big problem with choosing an HD-DVD drive is whether or not this format is going to beat Blu-ray. Even taking this into account, the Xbox 360 HD-DVD Player is excellent value. If you buy an Xbox 360 Premium (around £410), it compares favourably to Toshiba's budget HD-E1 (£379); it's a bargain

compared to the current range of Blu-ray players, which cost around £700. If you've already got an Xbox 360, it's incredible value and the easiest way to upgrade to HD DVD. Should Blu-ray eventually win the format war, you haven't really lost out.

Seth Barton

Also consider...

SLINGMEDIA Slingbox

★★★★★

£180 inc VAT



The Slingbox allows you to watch television anywhere in the world, as if you were sitting in your own living room. It has SCART and S-video inputs, so you can plug in whichever set-top boxes you want. It's simple to use, and even includes onscreen mock-ups of your remote controls.

This is a great product that's essential if you can't live without your TV.



VIDEO STREAMING DEVICE SCART and S-video inputs, Freeview tuner, IR transmitter, 10/100 Ethernet port
PART CODE SB150-110 SUPPLIER www.pcworld.co.uk DETAILS www.slingmedia.com ✓ Works well with set-top boxes; easy to set up ✗ Can't timeshift Freeview FULL REVIEW Sep 2006

FREECOM DVB-T USB Stick

★★★★★

£28 inc VAT

This was the best digital USB tuner in our Labs test in *Shopper* October 2006. It's easy to get up and running and found all the expected Freeview TV and radio channels. Video quality from our rooftop aerial was very good.

There's an excellent EPG, so it's easy to plan your viewing and schedule recordings. Sadly, the included mini remote can't control the EPG, having just basic buttons for changing the channel and volume.

Still, at £28 including VAT, you won't find a cheaper or simpler way of watching and recording Freeview TV on your computer.



USB DIGITAL TV TUNER USB Hi-Speed interface, RF input
PART CODE 25451 SUPPLIER www.freecom.com 08704 992499
DETAILS www.freecom.com ✓ Good value; good EPG ✗ Poor remote control FULL REVIEW Oct 2006

TERRATEC Cinergy DT USB XS Diversity

★★★★★

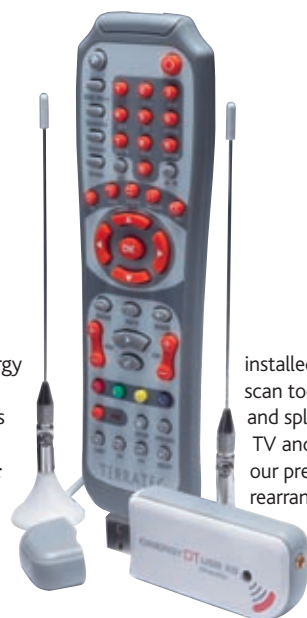
£79 inc VAT



Terratec's smart-looking Cinergy DT USB XS Diversity uses the same technology as Pinnacle's PCTV Dual DVB-T Diversity Stick, which we reviewed in *What's New: Video*, February 2007. As with the PCTV, we found the Cinergy DT greatly improved poor reception in diversity mode. It's even possible to receive programmes while travelling by car or train. However, you need to use two aerials spaced about 1m apart for diversity to function properly.

Two off-white mini-aerials are supplied in the box. Each one has a magnetic bottom, so you can attach it to metal surfaces, and a pair of suckers are provided as well. The aerials have joints so you can position them as required. It's good to see that Terratec has really thought about this part of the product. For those wanting to use the tuners off a single aerial, there's a lead provided to split an RF signal to the two inputs on the stick so you can record one channel while watching another.

The tuner is compatible with Microsoft's Media Center Edition (MCE). If you haven't got MCE, a large remote is also included in the box, which is sensibly laid out, clearly labelled and works well with the software provided. This tuner is shipped with Terratec's own Home Cinema application (THC). We've looked at this before and weren't terribly impressed; however, it has undergone a number of revisions and is much improved. Once



installed, it goes directly to the digital scan tool. This found all the channels and split them into separate lists for TV and radio stations. They weren't in our preferred order, but it was easy to rearrange them and remove the unwanted quiz channels in the settings menu.

The EPG provides all the information you'll need.

There's a now-and-next summary of all channels, or you can bring up a listing of all programmes on the current channel. It caches the programme information, so there's no waiting for it to catch up. It's not as good as the timeline layout in Windows XP MCE, though.

The EPG has one of the few scheduling systems we've seen that lets you schedule two programmes to be recorded at once. You can even timeshift a programme you are currently recording. Alternatively, you can watch and timeshift one programme while recording another. However, you can't watch two programmes simultaneously, which may be off-putting for sports enthusiasts.

The software is also compatible with the TVTV online listings system, costing £15 a year, which lets you schedule recordings online or from your mobile.

With decent picture quality, the THC software is a useful application. Add in the twin tuners for only £79, and this USB stick is our new favourite TV tuner.

Seth Barton

SUMMARY

- ✓ Twin tuners with diversity
- ✓ Can schedule two recordings at once
- ✗ No timeline EPG

USB TV TUNER USB2 interface, dual digital tuners, 2x RF input
PART CODE 10456
SUPPLIER www.pixmania.co.uk
DETAILS <http://uk.terratec.net>

CHOOSING A... TV Card

Follow the steps to find your ideal specs

INTERFACE: PCI
TUNES TO: Analogue
INPUTS: Radio frequency (RF)
CAPTURE FORMAT: N/A
HARDWARE COMPRESSION: No
Recommended minimum in grey

1 TV cards connect to PCs through a variety of interfaces. Internal cards fit into PCI or PCI-E x1 slots. Some double as graphics cards and use an AGP or PCI-E x16 slot. External devices with USB interfaces are easier to install but use up a USB port. USB stick and PC Card versions are also available, and are ideal for notebooks.

2 Most devices tune to either analogue or digital TV broadcasts from an external aerial, but hybrid devices can receive both types of broadcast. Terrestrial digital TV, or Freeview as it's commonly known in the UK, provides extra free channels, but you can't access subscription channels with a PC TV card. Analogue broadcasts can give a superior picture to digital broadcasts, but digital tuners don't suffer from noise and ghosting when the reception is poor – although they may cut out altogether. Check the digital reception in your area by going to www.freeview.co.uk and entering your postcode.

3 Basic devices provide an RF input for connecting an aerial. To connect an analogue video device, such as a camcorder or VCR for video editing, look for a composite or, preferably, S-video input. Digital tuners tend not to include this feature. Buy a hybrid device if you want to receive digital TV and capture analogue video.

4 If you want to use your PC for video editing or as a digital video recorder, you'll need to capture video in an appropriate compression format. The most practical format is MPEG2, which gives excellent quality and reasonable file sizes.

A PC with a 1GHz or faster processor can compress video to MPEG2 format in software, while slower machines need hardware compression on the card. Digital TV is broadcast in MPEG2 format, which makes recording to disk easy. Expect an hour of MPEG2 video to take up roughly 1.5GB of hard disk space.

5 Factor in any extras you want, such as an FM radio, a remote control and software for scheduled recordings and pausing live TV.

CANON MV960

★★★★★

£244 inc VAT



This budget DV camera is designed to shoot video in

widescreen to match your living room TV. It also has a widescreen LCD to help you frame shots. The controls are self-explanatory and there's an easy mode for beginners.

The MV960 shoots great video. Colours look excellent, from skin tones to brighter shades, and there's a surprising amount of detail. There's some picture noise, but it's minimal in decent lighting conditions.



DV CAMERA MiniDV storage, 25x optical zoom, 1/4in 0.8-megapixel CCD, 2.7in LCD screen, phono and composite output
PART CODE 1207B007AA
SUPPLIER www.amazon.com
DETAILS www.canon.co.uk
✓ Widescreen recording and LCD; easy menu system
✗ Low-resolution stills
FULL REVIEW Aug 2006

Battery life: 81m
-50% Reference +50% +100%

HUMAX Duovisio PVR-9200T

★★★★★

£173 inc VAT

The Duovisio has twin digital tuners to receive Freeview broadcasts, so

you can watch one programme while recording another, or record two programmes at once. The 160GB hard disk can hold around 100 hours of recorded shows and enables you to pause and rewind live TV. Its interface makes it easy to browse channels and schedule recordings from the one-week EPG. The only disappointment is in its inability to schedule entire series as you can with Sky+. Otherwise, it's a great buy.



HARD DISK RECORDER Two digital tuners, 160GB hard disk, RF input, two SCART, RF, composite, stereo phono, optical S/PDIF output, USB PART CODE PVR-9200T
SUPPLIER www.martindawes.net DETAILS www.humaxdigital.com/uk
✓ Twin digital tuner; easy-to-use interface
✗ Minor scheduling problems FULL REVIEW Jun 2006